

914TH AIRLIFT WING INSTRUCTION 32-2001 26 SEPTEMBER 2003

Civil Engineering

FIRE PROTECTION AND FIRE PREVENTION WING MANAGEMENT PLAN

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction outlines the procedures for an effective Fire Protection and Prevention program to prevent loss of life, property damage and related intangible losses. It implements Air Force Instruction 32-2001, *The Fire Protection Operations and Fire Prevention Program*. The Fire Protection and Fire Prevention program establishes organizational and individual responsibilities and effects all areas, facilities, and activities at the 914th Airlift Wing (AW). It applies to all units assigned or attached to the 914th AW, including tenant units, visitors, contractors, concessionaries, and the Base Operating Services (BOS) contractor.

SUMMARY OF REVISIONS

This document is substantially revised and must be completely reviewed.

1. Responsibilities:

- 1.1. The Installation Commander (914 AW/CC) is responsible for Fire Protection at the 914th Airlift Wing and the 107th Air Refueling Wing (ARW).
- 1.2. The Base Civil Engineer (BCE) is the Base Fire Marshall and is responsible to the installation commander for the effective and efficient execution of the installation's fire protection program. The fire marshal provides the Chief, Fire Emergency Services with the necessary support to ensure the highest possible priority and funding of fire protection and prevention initiatives to accomplish mission support. The BCE supervises the chief, fire emergency services.
- 1.3. The Chief, Fire Emergency Services (CEF) is responsible to the Base Fire Marshall for determining the resources required for the installation's overall fire protection program. The Chief, Fire Emergency Services will establish and implement an effective fire protection and prevention program, including hazardous materials, mutual aid, emergency medical care, confined space rescue, and emergency response programs. This authority extends over all tenants and contractors on base.

1.4. Unit commanders, division chiefs, facility managers, supervisors, and their subordinates at all levels are responsible for and must ensure that sound Fire Prevention procedures are established and practiced in each activity under their jurisdiction.

2. Installation Fire Protection and Prevention program:

- 2.1. Unit commanders will execute comprehensive installation fire protection and fire prevention programs.
 - 2.1.1. CEF with the help of the Assistant Chief of Fire Prevention develops, manages, and implements Fire Protection and Fire Prevention programs. CEF ensures that:
 - 2.1.2. All facilities are inspected at least annually to identify and eliminate potential fire hazards and that fire prevention measures are enforced.
 - 2.1.3. The emergency services notification number "911" is properly displayed on all base operated phones. Fire Protection and Fire Prevention program elements (Attachment 1-Attachment 8) are made available to all unit commanders, division chiefs, facility managers, supervisors, tenants, and concessionaries.
- 2.2. Unit commanders, division chiefs, facility managers, and supervisors will develop operating instructions (OI's) to follow when fire is discovered. OI's should cover the fire protection and prevention elements outlined in the attachments of this instruction as well as operations unique to the functional area.
 - 2.2.1. Operating instructions must be coordinated through the base fire prevention office (CEFT) and reviewed annually, or upon change in functional operations or process.

3. Exceptions to this Instruction.

3.1. Exceptions will not be made to this instruction without approval of the installation commander or his/her representative.

JAMES B. ROBERTS Jr., Col, USAFR Commander, 914 Airlift Wing

FIRE PREVENTION

- **A1.1.** Functional managers and facility managers are responsible for monthly inspections of their organizations to ensure compliance with this instruction, to eliminate fire hazards and correct deficiencies. This includes:
 - A1.1.1. Ensuring that:
 - A1.1.1.1. All work areas are left in a fire safe condition at the end of each day.
 - A1.1.1.2. All non-essential electric machines and equipment are shut off when not in use
 - A1.1.1.3. There will be no storage in any attic, crawl space, stairwell, exit, or exit enclosure.
 - A1.1.1.4. Flammable and combustible products are stored in an approved flammable storage locker or cabinet.
 - A1.1.1.5. All waste materials are kept in non-combustible containers and emptied daily. Office recycle containers will be emptied daily.
 - A1.1.1.6. Hazardous waste materials are disposed of in accordance with current hazardous waste handling and disposal procedures.
 - A1.1.1.7. Mechanical rooms are not utilized for any storage purpose.
 - A1.1.1.8. An electrical permit is required for any non-government electrical appliance. It will need to be inspected by the base civil engineer electrician and by the fire protection section before being utilized. Examples: space heaters, coffee pots, microwaves, toasters, and crock-pots.
 - A1.1.1.9. Authorized smoking areas are kept free of trash and combustible material and that smoking materials are extinguished and disposed of in approved containers.
 - A1.1.1.10. Any operation or process that requires an open flame will be coordinated through the fire prevention office and or Operations section. This includes outdoor recreational cooking.
- **A1.2.** Inspect electrical equipment and appliances monthly for worn or defective cords.
- **A1.3.** Accompanying or delegating an alternate to accompany the fire inspector during fire prevention visits and to ensure that all areas are accessible to the fire inspector.
- **A1.4.** Monthly visual inspection of all fire extinguishers, extinguisher cabinets, emergency lights, exit sign lights, pull stations and extinguishing systems, for signs of damage, tampering, or use. Report deficiencies to the fire prevention section and CE service call desk.
 - A1.4.1. The monthly extinguisher inspection tag is signed off.
- **A1.5.** Appropriate action is taken against anyone who carelessly or willfully violates fire prevention policies, or by negligence causes fire loss to government property.

LIFE SAFETY

- **A2.1.** Unit commanders, division chiefs, facility managers, and supervisors are responsible for ensuring that all life safety devices and features within areas of their jurisdiction are operational.
- **A2.2.** Functional managers and facility managers will ensure that all:
 - A2.2.1. Hallways, stairwells, or any other path of egress are not obstructed in any manner.
 - A2.2.2. Exits and exit ways are clear of trash, debris, and obstructions (blue bins, trashcans, de-icing drums etc.), including ice and snow, for a distance of ten feet from the exit.
 - A2.2.3. Exits signs in their activity are electrically illuminated and operational at all times.
 - A2.2.4. Doors which are identified as exits, are kept unlocked and not chained while occupants are in the facility.
 - A2.2.5. Doors which are identified as fire doors, which are designed to stop the spread of flame and smoke, remain closed at all times and not held open by any device except as designed.
 - A2.2.5.1. Designed devices are not tampered with.
 - A2.2.6. Making sure fire protection features and devices are operational, unobstructed, and undamaged. These include: heat and smoke detectors, manual pull stations, portable fire extinguishers, extinguishing systems, emergency lighting, door panic hardware, fire and smoke doors and fire alarm control panels.
 - A2.2.7. Making sure handicap devices are in working order.

FIRE PREVENTION TRAINING

- **A3.1.** Unit commanders, division chiefs, and supervisors will:
 - A3.1.1. Annually conduct fire safety and prevention briefings to their subordinates at all levels and annotate this training on the Air Force form 55, **Employee Safety And Health Record** or electronic equivalent.
 - A3.1.2. Ensure that all personnel are observing fire regulations.
 - A3.1.3. Provide training in compliance with provisions in Air Force Occupational Safety and Health (AFOSH) standard 91-501, *Safety*, and Department of Labor Occupational Safety and Health Act (OSHA) standard 1910.157, *Portable Fire Extinguishers*.
 - A3.1.4. Ensure a fire/evacuation assembly point is designated and that all employees are briefed. The assembly point should be far enough away from the building to protect the people and not hinder fire-fighting operations. The assembly point should not be near containers that could conceal secondary explosives. Assembly point should be posted on common bulletin boards.
- **A3.2.** Newly assigned personnel will be briefed within thirty days of their assignment by Fire Prevention personnel.
 - A3.2.1. Briefing topics shall include, building evacuation/shelter-in-place procedures, assembly point, fire-reporting procedures using on-base phones, cell and pay phones, exit locations, fire extinguisher locations, fire alarm pull station locations, safe flammable and combustible storage, and house keeping practices.
- **A3.3.** Annual fire safety and extinguisher familiarization training will be conducted by the fire prevention section of the fire department as requested.
- **A3.4.** Request for hands-on flight line extinguisher training for flight line personnel, or any other section, should be coordinated through the fire prevention office.
- **A3.5.** Building fire/evacuation drills are conducted at the discretion of the fire prevention office or as requested by the unit authority.

FIRE PREVENTION IN HANGARS, SHOPS, AND FLIGHT LINE

- **A4.1.** Flight chiefs, shop foreman, and supervisors are responsible for fire safety within their workplace.
- **A4.2.** Aircraft stands, motorized equipment, electrical equipment and other material will not be stored in such a manner as to block exits, interfere with fire protection systems, equipment, or block accessibility or visibility of fire extinguishers or pull stations.
- **A4.3.** Aircraft will not be fueled/de-fueled, or ground fuel transferred, while inside the hangar, or within fifty feet of the hangar without *special* written permission from the fire prevention office and coordinating agencies. Hangars designed for this type of operation are exempt, (bldg 707).
- **A4.4.** Aircraft will not be serviced with oxygen while inside hangars, or within fifty feet of hangars.
 - A4.4.1. At least one (1) flight line fire extinguisher (150 lb wheeled) must be easily accessible during any refuel/de-fuel or oxygen servicing operation.
- **A4.5.** Aircraft engines, aircraft APU's or ground power units will not be operated inside hangars under any circumstances.
- **A4.6.** Batteries should be disconnected and aircraft grounded at all times while inside the hangar.
- **A4.7.** No open flame, spark-producing device, exposed filament heater, or any equipment capable of igniting vapors or gases are permitted within fifty feet of the hangar.
 - A4.7.1. Blow torches, soldering irons, and other equipment in which an open flame must be used, will be restricted to isolated places where there is air circulation, and where no explosive vapors are present. An Air Force form 592, **Welding, Cutting, and Brazing Permit,** must be obtained from the fire prevention office prior to beginning any open flame operation.
- **A4.8.** Only approved Class 1, Division 1, portable battery operated inspection lights will be used in aircraft hangars.
- **A4.9.** Flammable or combustible materials and liquids required to perform maintenance, shall be stored in approved containers and labeled as to the contents. The labeled containers shall be housed within approved flammable storage cabinets or lockers. The Material Safety Data Sheet (MSDS) should be made available upon request.
 - A4.9.1. Quantities of flammable and combustible liquids stored in cabinets shall be in accordance with National Fire Codes, Air Force Occupational and Health (AFOSH) standards, and Codes of Federal Regulations.
 - A4.9.2. Flammable liquid storage cabinets shall be kept closed at all times, when not being accessed.
- **A4.10.** Inspections will be made daily prior to closing shops and hangars to ensure a fire safe condition is maintained.

- **A4.11.** Flight line fire extinguishers will be located along the ramp, spaced between the aircraft, one extinguisher for every two planes and far enough away to prevent damage to the aircraft or extinguisher by prop wash, jet blast, or inclement weather.
 - A4.11.1. Flight line extinguishers are accountable and maintained by the fire prevention section. Damaged, used, or inoperable extinguishers shall be removed from service and immediately reported to the fire department for required maintenance or repair.
 - A4.11.2. Flight line extinguishers which are to be deployed with the aircraft must be signed for on an Air Force Form 1297, **Temporary Issue Receipt**, from the fire prevention section.

MOTOR VEHICLE MAINTENANCE FIRE PREVENTION

- **A5.1.** Supervisors, vehicle maintenance chiefs, and shop foremen are responsible for fire safety compliance within their workplace.
- **A5.2.** Special activities necessary to perform vehicle maintenance operations, such as painting, welding or other hazardous operations, will be performed in places or areas designated for that purpose.
- **A5.3.** Flame producing devices are prohibited throughout the garages, except in specifically designated locations, such as welding areas.
- **A5.4.** Oily rags and waste will not be left on floors, workbenches, desks, etc.
- **A5.5.** Oil, gasoline, or any other products spilled, will be cleaned up immediately and disposed of properly.
- **A5.6.** The exhaust system will be in operation while "engine-run" maintenance is being performed on vehicles.
- **A5.7.** Mobile equipment having gasoline tanks mounted over the engines will not be refueled within fifty feet of the building and only after a "cool down" period.
 - A5.7.1. Should gasoline tanks overflow during refueling operations, the engine will not be started until the fuel has been cleaned up and sufficient time has passed for evaporation of fumes.
 - A5.7.2. During refueling operations and starting of engines after refueling, a fire extinguisher will be held "at the ready" in the event of fire.
 - A5.7.3. Trucks, trailers, and other special vehicles containing small auxiliary gasoline powered units will be equipped with suitable fire extinguishers.
 - A5.7.4. Gasoline engines used as power generators inside trailers or closed spaces will be refueled with extreme care to prevent spillage and ignition from electrical sources or hot exhaust.
- **A5.8.** All electrical devices and fixtures will be kept in good working condition at all times.
 - A5.8.1. All defective equipment will be repaired only by authorized technicians or tradesmen.
 - A5.8.2. Metal parts of all electrical machines will be grounded to a low resistance ground.
- **A5.9.** Flammable and combustible liquids will be stored in approved containers and housed in approved cabinets or lockers in quantities specified by the National Fire Protection Association, Code of Federal Regulations, Air Force directives, or local established policies.
- **A5.10.** Hazardous waste products will be stored in approved accumulation points, away from ignition sources, until disposed of or re-cycled according to regulations, policies, or directives.

FIRE PREVENTION IN PLACES OF PUBLIC ASSEMBLY, RECREATION, AND BILLETING FACILITIES

- **A6.1.** Managers of places of public assembly and recreation facilities are responsible for fire safety compliance within areas of their jurisdiction. This responsibility extends over contracted services and concessionaries.
- **A6.2.** Managers of places of public assembly and recreation facilities must establish and maintain a certification system to ensure employees have been trained and understand their fire prevention responsibilities within their work environment.
 - A6.2.1. This certification system includes yearly training of employees and immediate indoctrination of newly hired employees.
- **A6.3.** Managers, or alternates will conduct fire and security inspections of facilities at closing time in accordance with the current Standard Form 701, **Activity Security Checklist**.
 - A6.3.1. The closing inspection will be reported to security police (SP) and fire department for entry into the daily logs.
 - A6.3.2. If no report is received within one (1) hour of the established closing time, SP will accomplish a visual inspection of the facility and notify the failure of the manager to accomplish closing procedures to the fire prevention section the following workday.
- **A6.4.** Managers of facilities, where commercial or restaurant type cooking is performed, will establish and enforce procedures to ensure grease filters and exposed surfaces of the kitchen range hoods are thoroughly cleaned at least once a day.
 - A6.4.1. The fire prevention section will arrange for cleaning and inspection of the duct system, deep fat fryers, and fire protection system by a certified contractor. A semi-annual basis for cleaning and annual for inspection. These tests will ensure dual thermostats and other safety devices are working properly. All documentation of cleaning and inspections will be kept at the fire prevention office.
 - A6.4.2. Cooking is not permitted under range hoods without grease filters installed and operational exhaust fans.
 - A6.4.3. Metal covers must be provided and pre-positioned for each deep fat fryer for immediate use in case of a grease fire.
- **A6.5.** Open flames (candles) designed to enhance the atmosphere in places of public assembly and billeting are not permitted, unless written permission is given through the fire prevention office.
- **A6.6.** The billeting manager will ensure fire protection features in dormitories and individual rooms are fully operational, prior to assigning rooms for occupancy.
 - A6.6.1. Emergency evacuation plans should be available for each occupant's familiarization.
 - A6.6.2. Emergency telephone numbers should be visibly accessible.

- **A6.7.** Smoking in base buildings is prohibited.
 - A6.7.1. Smoking materials in designated smoking areas will be placed in approved receptacles.
- **A6.8.** Space heaters, hot plates, griddles, woks, fondue pots, crock pots and any other electrical cooking devices are strictly prohibited.
- **A6.9.** Open flame of any type is not permitted in billeting rooms.

FIRE PREVENTION AND SAFETY IN FUEL DISPENSING AREAS

- **A7.1.** Turn off your vehicle engine while refueling. Put your vehicle in park and/or set the emergency brake. Disable or turn off any auxiliary sources of ignition.
- **A7.2.** Do not smoke, light matches or lighters while refueling at the pump or when using gasoline anywhere else.
- **A7.3.** Use only the refueling latch provided on the gasoline dispenser nozzle, never jam anything in to the refueling latch on the nozzle to keep it open.
- **A7.4.** Do not re-enter your vehicle during refueling.
- **A7.5.** In the unlikely event a static-caused fire occurs when refueling, leave the nozzle in the fill pipe and back away from the vehicle. Activate the EMERGENCY STOP BUTTON and notify your emergency services.
- A7.6. Do not over-fill or top-off your vehicle tank, which can cause gasoline spillage.
- **A7.7.** Avoid prolonged breathing of gasoline vapors. Use gasoline only in open areas that get plenty of fresh air. Keep your face away from the nozzle or container opening.
- **A7.8.** When dispensing gasoline into a container, use only an approved container and place it on the ground when refueling to avoid a possible static electricity ignition of fuel vapors. Containers should never be filled while inside a vehicle or in its trunk, or in the bed of a pickup truck
- **A7.9.** Only store gasoline in approved containers as required by federal or state authorities. Never store gasoline in glass or any other unapproved containers.
- **A7.10.** When filling a portable container, manually control the nozzle valve throughout the filling process. Fill a portable container slowly to decrease the chance of static electricity buildup and minimize spilling or splattering.
- **A7.11.** Fill portable containers no more than 95 percent full to allow for expansion.
- **A7.12.** If gasoline spills on the container, make sure that it has evaporated before you place the container in your vehicle. Report spills to your emergency services.
- **A7.13.** Never siphon gasoline by mouth or put gasoline in your mouth for any reason. Gasoline can be harmful or fatal if swallowed. If someone swallows gasoline, do not induce vomiting. Contact a doctor immediately.
- **A7.14.** Keep gasoline away from your eyes and skin; it may cause irritation. Remove gasoline-soaked clothing immediately.

- **A7.15.** Use gasoline as a motor fuel only. Never use gasoline to wash your hands or as a cleaning solvent.
- **A7.16.** Do not use cell phones/portable radios while refueling your vehicle from station pumps or portable fueling containers.

MISCELLANEOUS FIRE PREVENTION POLICIES AND PROCEDURES

- **A8.1.** All unit commanders, division chiefs, facility managers, supervisors, and subordinates at all levels are responsible for complying with the fire prevention policies and procedures covered in these attachments.
- **A8.2.** Holiday and Public Gathering procedures:
 - A8.2.1. Natural Christmas trees will not be displayed in any base facility unless it is a "potted plant" type tree.
 - A8.2.2. "Potted plant" Christmas trees displayed in a base facility will be secured and kept well away from stoves, radiators, or other sources of ignition and placed so they do not block or hamper means of egress or exits.
 - A8.2.3. Artificial Christmas trees must be chemically treated or be inherently flame retardant.
 - A8.2.4. Electrical devices of any type are prohibited on metallic Christmas trees.
 - A8.2.5. Straw and Hay decorations are prohibited.
- **A8.3.** Electrical lighting devices and extension cords will be inspected for serviceability before use and will be of the types tested and listed by Underwriters Laboratories (UL).
 - A8.3.1. Overloaded electrical circuits must be avoided. Civil engineering electricians ill determine adequacy of the circuits, requested through the service call desk.
- **A8.4.** In any facility where a major social event is planned, the facility manager will consult with the fire prevention section prior to displaying unusual arrangements and decorations. All decorations will be of the non-flammable or fire retardant type.
- **A8.5.** Over crowding of facilities during public gatherings is prohibited. Occupancy capacity standards will not be exceeded.
- **A8.6.** The use of charcoal fueled barbecue grills is discouraged by the base Fire Chief. Portable 20-lb propane fed units are the preferred appliance and if long term use in one location is desired, then a permanent natural gas unit may be installed.
 - A8.6.1. Disposal of charcoal ashes in waste dumpsters is strictly prohibited and must be extinguished with water if left unattended.
 - A8.6.2. When any type of barbecue grill is used, the fire prevention section must be contacted for issuance of Air Force Form 592, **Welding, Cutting, and Brazing Permit**. Acquisition of a pressurized water extinguisher is required.
 - A8.6.3. Storage of propane tanks attached or detached from grills is prohibited in facilities or mechanical-boiler rooms. Outside storage is recommended. Cylinders of the one (1) Lb capacity or less may be stored in approved containers (Flammable Storage Lockers).